ABSTRACT

Phthalocyanines And Their Use In Ink-Jet Printers

5 A composition comprising:

(a) a major dye component which is a mixture of phthalocyanine dyes of Formula (1) and salts thereof:

$$MPc \underbrace{\hspace{1cm} \left(SO_{3}H \right)_{x}}_{ \left(SO_{2}NR^{1}R^{2} \right)_{y}}$$

10

Formula (1)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;

15

20

25

 R^1 and R^2 independently are H or optionally substituted C_{1-4} alkyl;

R³ is H or optionally substituted hydrocarbyl; and

R⁴ is optionally substituted hydrocarbyl; or

R³ and R⁴ together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring; and

(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water.

Also novel dyes, ink-jet printing processes, printed images, and cartridges.

5